





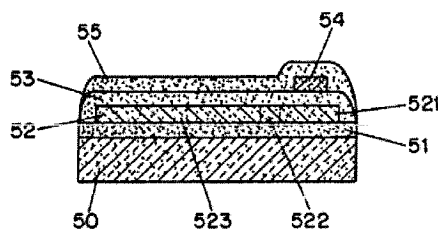


CRYSTALLIZATION PROCESSING OF SEMICONDUCTOR FILM REGIONS ON A SUBSTRATE, AND DEVICES MADE THEREWITH**Publication number:** WO9745827**Publication date:** 1997-12-04**Inventor:** IM JAMES S (US); SONG HYUN JIN (US); SPOSILI ROBERT S (US); YOON JUNG H (US)**Applicant:** UNIV COLUMBIA (US); IM JAMES S (US); SONG HYUN JIN (US); SPOSILI ROBERT S (US); YOON JUNG H (US)**Classification:****- international:** C30B13/24; G02F1/136; G02F1/1368; H01L21/20; H01L21/30; H01L21/336; H01L29/786; C30B13/00; G02F1/13; H01L21/02; H01L29/66; (IPC1-7): G09G3/36; C30B13/06; H01L21/20; H01L21/302**- European:** C30B13/24; H01L21/20D2; H01L21/30**Application number:** WO1996US07730 19960528**Priority number(s):** WO1996US07730 19960528**Also published as:** CA2256699 (C)**Cited documents:** US4382658
 USRE33836E
 US5204659
 US5061655
 US5409867
more >>[Report a data error here](#)**Abstract of WO9745827**

Semiconductor integrated devices such as transistors are formed in a film of semiconductor material formed on a substrate. For improved device characteristics, the semiconductor material has regular, quasi-regular or single-crystal structure. Such a structure is made by a technique involving localized irradiation of the film with one or several pulses of a beam of laser radiation, locally to melt the film through its entire thickness. The molten material then solidifies laterally from a seed area of the film. The semiconductor devices can be included as pixel controllers and drivers in liquid-crystal display devices, and in image sensors, static random-access memories (SRAM), silicon-on-insulator (SOI) devices, and three-dimensional integrated circuit devices.



Data supplied from the esp@cenet database - Worldwide